DEPARTMENT OF HEALTH SERVICES TOXIC SUBSTANCES CONTROL PROGRAM 700 HEINZ AVE., BLDG. F, SUITE 200 BERKELEY, CA 94710-2737

N00236.000519 ALAMEDA POINT SSIC NO. 5090.3



June 17, 1991

Mr. Wing Wong, Code 1811WW
Western Division
Naval Facilities Engineering Command
P.O. Box 727
San Bruno, CA 94066-0720

Dear Mr. Wong:

DHS COMMENTS ON WELL DECOMMISSIONING METHOD, NAVAL AIR STATION, ALAMEDA

This letter is in response to your letter to DHS: 5090 Ser 1813EG/00722, dated June 4, 1991.

The following are the recommendations of DHS with respect to the proposed well decommissioning method.

- 1. The bentonite employed should be non-beneficiated bentonite.
- 2. Specify the cement to be used. Cement without additives is recommended.
- 3. The tremmie pipe should be kept at the bottom of the well while the cement bentonite grout is introduced into the well. Or, the tremmie pipe should be placed at least twenty feet below the level of the grout in the well.
- 4. The compressive strength of the cement bentonite grout should be specified.
- 5. Pre-hydrate the bentonite before adding the cement.
- 6. A ratio of 8-10 gallons of water to a sack of cement should not be exceeded. The water should be measured in the field.
- 7. Calculate the approximate volume of the sandpack and the minimum amount of cement to be placed in the well.
- 8. The bentonite in the mix should not exceed six percent by weight. Weigh the bentonite with a scale in the field.
- 9. Perform a radioactive check on the water displaced to the surface.
- 10. Maintain well decommissing logs and include the logs in the report. Field monitoring and sample analysis should be performed.

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- 11. Survey the wells that are decommissioned.
- 12. Specify the pressure to be applied. Maintain pressure until the grout sets-up.
- 13. Include with the report any information available on well construction.
- 14. Casings that extent above the ground surface should be cut to ground surface.
- 15. Well water that is displaced to the surface and pumped into drums should be analysed immediately for all suspected contaminants. The date of collection and the date of sampling from the drum for analysis should be noted on the drum.
- 16. Removal of the upper two feet of casing, seal and filter pack. is preferred to pressure grouting to the surface. Pressure grouting the wells to the surface may pose a problem with respect to future land use. A wide range of land uses would require removal in the future. The concerns that are raised about health and safety are legitimate concerns. But, materials grouted in place may be more costly to remove in the future and identical health and safety concerns will apply at that time.
- 17. Check with the base engineering unit to determine if base restrictions exist which would disallow pressure grouting to the surface.

Please call Eileen Hughes at (415) 540-3848, if you have any questions.

Sincerely,

Eileen Hughes

Waste Management Engineer Site Mitigation Branch

Region 2

Toxic Substances Control Program

cc: See attached page

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cc: PRC Environmental Management, Inc.

11030 White Rock Road Rancho Cordova, CA 95670

Attn: Kirk Switzer

James Montgomery Engineers 365 Lennon Lane Walnut Creek, CA 94598 Attn: Steve Newton

NAS Alameda Alameda, CA 94501 Attn: Randy Cate Commanding Officer